

## **Appendix IV**

### **Economic Impact Analysis**

#### **Introduction**

Section 44380(a)(2) of the H&SC allows the districts to either adopt district Air Toxics “Hot Spots” fee rules or request the ARB to adopt a fee schedule for them. Thirty of the 35 districts have elected to adopt district fee rules. For the thirty districts adopting their own fee schedules, fees were estimated using their draft or adopted fee rules. For the five districts for which the ARB is calculating fees, the fees are based on the proposed program category in which the facilities are included and on the draft fees.

This Appendix evaluates the potential economic impact on California businesses of the proposed amendments to the Fee Regulation. Section 11346.3 of the Government Code requires that, in proposing to adopt or amend any administrative regulation, State agencies shall assess the potential for adverse economic impacts on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states. The assessment shall also include the potential impact of the regulation on California jobs and on business expansion, elimination, or creation.

This economic impact analysis is based on a comparison of the return on owners' equity (ROE) for affected businesses before and after the inclusion of the amended fees. The analysis also uses publicly available information to assess the impact on competitiveness, jobs, and business expansion, elimination, or creation. The results are intended to provide an indication of the potential economic impact of the amended fees on businesses and individuals in California.

#### **Affected Business**

Any business which manufactures, formulates, uses, or releases any listed substance or any other substance which reacts to form a listed substance and emits ten or more tons per year of criteria pollutants (total organic gases, particulate matter, nitrogen oxides, or sulfur oxides) is affected by the amended regulation. Also affected are businesses listed on a district toxic inventory, report, or survey as referenced in Appendix A to the Fee Regulation or any business which releases less than ten tons per year of criteria pollutants and falls within a class listed in Appendix E to the Emission Inventory Criteria and Guidelines Report. A copy of the amended Guidelines Report can be obtained by accessing the ARB's home page at <http://www.arb.ca.gov/div/tsd/eib/ab2588/ab2588.html> on the Internet. Table IV-1 provides a list of industries with affected businesses.

**Table IV-1**

**List of Industries with Affected Businesses**

SIC Code	Industry
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131	COTTON
132	TOBACCO
723	CROP PREPARATION SVCS FOR MKT
1061	FERROALLOY ORES, EXC VANADIUM
1099	METAL ORES, NEC
1221	BITUMINOUS COAL AND LIGNITE - SURFACE
1311	CRUDE PETRO AND NATURAL GAS
1321	NATURAL GAS LIQUIDS
1389	OIL/GAS FIELD SERVICES, NEC
1429	CRUSHED AND BROKEN STONE, NEC
1442	CONSTRUCTION SAND AND GRAVEL
1446	INDUSTRIAL SAND
1455	KAOLIN AND BALL CLAY
1474	POTASH/SODA/BORATE MINERALS
1623	WATER, SEWER, AND UTILITY LINE
2013	SAUSAGES & OTHER PREPARED MEAT
2022	CHEESE, NATURAL AND PROCESSED
2032	CANNED SPECIALTIES
2033	CANNED FRUITS AND VEGETABLES
2034	DEHYDRATED FRUITS/VEGTLB/SOUP
2037	FROZEN FRUITS AND VEGETABLES
2041	FLOUR/OTHER GRAIN MILL PRODUCT
2047	DOG AND CAT FOOD
2051	BREAD, CAKE, & RELATED PROD
2062	CANE SUGAR REFINING
2074	COTTONSEED OIL MILLS
2077	ANIMAL & MARINE FATS AND OILS
2084	WINES, BRANDY, BRANDY SPIRITS
2095	ROASTED COFFEE
2099	FOOD PREPARATIONS, NEC
2221	WEAVING MILLS, SYNTHETICS
2295	COATED FABRICS, NOT RUBBERIZED
2299	TEXTILE GOODS, NEC
2396	AUTOMOTIVE & APPAREL TRIMMINGS
2421	SAWMILLS & PLANING MILLS, GNL
2426	HARDWOOD DIMENSION & FLOORING
2431	MILLWORK
2436	SOFTWOOD VENEER AND PLYWOOD

SIC Code	Industry
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2451	MOBILE HOMES
2491	WOOD PRESERVING
2499	WOOD PRODUCTS, NEC
2521	WOOD OFFICE FURNITURE
2522	OFFICE FURNITURE, EXCEPT WOOD
2541	WOOD PARTITIONS AND FIXTURES
2591	DRAPERY HARDWARE/BLINDS/SHADES
2599	FURNITURE AND FIXTURES, NEC
2611	PULP MILLS
2621	PAPER MILLS
2631	PAPERBOARD MILLS
2653	CORRUGATED & SOLID FIBER BOXES
2721	PERIODICALS
2752	COMMERCIAL PRINTING, LITHOGRAPHIC
2759	COMMERCIAL PRINTING, NEC
2812	ALKALIES AND CHLORINE
2819	INDUSTRIAL INORGANIC CHMLS,NEC
2821	PLASTICS MATERIALS AND RESINS
2822	SYNTHETIC RUBBER
2824	ORGANIC FIBERS, NONCELLULOSIC
2834	PHARMACEUTICAL PREPARATIONS
2843	SURFACE ACTIVE AGENTS
2851	PAINTS AND ALLIED PRODUCTS
2875	FERTILIZERS, MIXING ONLY
2891	ADHESIVES AND SEALANTS
2899	CHEMICAL PREPARATIONS, NEC
2911	PETROLEUM REFINING
2951	PAVING MIXTURES AND BLOCKS
2952	ASPHALT FELTS AND COATINGS
2992	LUBRICATING OILS AND GREASES
2999	PETROLEUM & COAL PRODUCTS, NEC
3011	TIRES AND INNER TUBES
3053	GASKETS, PACKING/SEALING DVCS
3061	MECHANICAL RUBBER GOODS
3069	FABRICATED RUBBER PRODUCTS,NEC
3083	LAMINATED PLSTCS PLATE & SHEET
3084	PLASTICS PIPE
3086	PLASTICS FOAM PRODUCTS
3087	CUSTOM COMPOUND PRCHSD RESINS
3088	CS PRODUCTS, NEC
3089	PLASTICS PRODUCTS, NEC
3211	FLAT GLASS
3221	GLASS CONTAINERS

SIC Code	Industry
3241	CEMENT, HYDRAULIC
3255	CLAY REFRACTORIES
3259	STRUCTURAL CLAY PRODUCTS, NEC
3261	VITREOUS PLUMBING FIXTURES
3272	CONCRETE PRODUCTS, NEC
3273	READY-MIXED CONCRETE
3274	LIME
3295	MINERALS, GROUND OR TREATED
3296	MINERAL WOOL
3312	BLAST FURNACES AND STEEL MILLS
3321	GRAY IRON FOUNDRIES
3324	STEEL INVESTMENT FOUNDRIES
3334	PRIMARY ALUMINUM
3339	PRIMARY NONFERROUS METALS, NEC
3341	SECONDARY NONFERROUS METALS
3353	ALUMINUM SHEET, PLATE AND FOIL
3363	ALUMINUM DIE -CASTINGS
3365	ALUMINUM FOUNDRIE S
3366	COPPER FOUNDRIES
3369	NONFERROUS FOUNDRIES, NEC
3398	METAL HEAT TREATING
3399	PRIMARY METAL PRODUCTS, NEC
3411	METAL CANS
3412	METAL BARRELS, DRUMS, & PAILS
3432	PLUMBING FIXTR FITTINGS/TRIM
3443	FABRICATE PLATE WK-BOILER SHOP
3444	SHEET METALWORK
3448	PREFABRICATED METAL BUILDINGS
3451	SCREW MACHINE PRODUCTS
3452	BOLTS, NUTS, RIVETS, & WASHERS
3462	IRON AND STEEL FORGINGS
3463	NONFERROUS FORGINGS
3471	PLATING AND POLISHING
3479	METAL COATING/ALLIED SERVICES
3489	ORDNANCE AND ACCESSORIES, NEC
3491	INDUSTRIAL VALVES
3492	FLUID PWR VLVS/HOSE FITTINGS
3493	STEEL SPRINGS, EXC WIRE
3494	VALVES AND PIPE FITTINGS, NEC
3498	FABRICATED PIPE AND FITTINGS
3499	FABRICATED METAL PRODUCTS, NEC
3511	TURBINES/TURBINE GENERATOR SET
3519	INTERNAL COMBUSTION ENGINE,NEC
3542	MACHINE TOOLS, METAL FORM TYPE

SIC Code	Industry
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3572	COMPUTER STORAGE DEVICES
3599	INDUSTRIAL MACHINERY, NEC
3621	MOTORS AND GENERATORS
3651	RADIO AND TV RECEIVING SETS
3663	RADIO/TV COMMUNICATIONS EQPMT
3671	ELECTRON TUBES
3672	PRINTED CIRCUIT BOARDS
3674	SEMICONDUCTORS/RELATED DEVICES
3679	ELECTRONIC COMPONENTS, NEC
3691	STORAGE BATTERIES
3699	ELECTRICAL EQUIP/SUPPLIES, NEC
3711	MOTOR VEHICLES AND CAR BODIES
3713	TRUCK AND BUS BODIES
3714	MOTOR VEHICLE PARTS/ACCESSORIES
3715	TRUCK TRAILERS
3716	MOTOR HOME MANUFACTURE
3721	AIRCRAFT
3724	AIRCRAFT ENGINES/ENGINE PARTS
3728	AIRCRAFT PARTS/EQUIPMENT, NEC
3731	SHIP BUILDING AND REPAIRING
3732	BOAT BUILDING AND REPAIRING
3761	GUIDED MISSILES AND SPACE VEH
3764	SPACE PROPULSION UNITS & PARTS
3799	TRANSPORTATION EQUIPMENT, NEC
3812	SEARCH & NAVIGATION EQUIPMENT
3822	ENVIRONMENTAL CONTROLS
3827	OPTICAL INSTRUMENTS AND LENSES
3829	MEASURING/CONTROLLING DVCS,NEC
3841	SURGICAL & MEDICAL INSTRUMENTS
3842	SURGICAL APPLIANCES & SUPPLIES
3845	ELECTROMEDICAL EQUIPMENT
3851	OPHTALMIC GOODS
3931	MUSICAL INSTRUMENTS
3949	SPORTING & ATHLETIC GOODS,NEC
3951	PENS AND MECHANICAL PENCILS
3993	SIGNS & ADVERTISING DISPLAYS
3999	MANUFACTURING INDUSTRIES, NEC
4499	WATER TRANSPORTATION SERVICES, NEC
4581	AIRPORTS/FLYING FIELDS/SVCS
4612	CRUDE PETROLEUM PIPE LINES
4613	REFINED PETROLEUM PIPE LINES
4729	PASSENGER TRANSPORT ARRANGEMENT, NEC
4911	ELECTRIC SERVICES

SIC Code	Industry
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4922	NATURAL GAS TRANSMISSION
4923	GAS TRANSMISSION/DISTRIBUTION
4925	GAS PRODUCTION AND/OR DISTRIB
4931	ELECTRIC & OTHER SERVICES COMB
4941	WATER SUPPLY
4952	SEWERAGE SYSTEMS
4953	REFUSE SYSTEMS
4959	SANITARY SERVICES, NEC
4961	STEAM SUPPLY
5031	LUMBER, PLYWOOD & MILLWORK
5051	METALS SERVICE CENTERS/OFFICES
5083	FARM AND GARDEN MACHINERY
5088	TRANSPORTATION EQUIP/SUPPLIES
5093	SCRAP & WASTE MATERIALS
5145	CONFECTIONERY
5169	CHEMICALS & ALLIED PRDCTS, NEC
5171	PETRO BULK STATIONS/TERMINALS
5172	PETROLEUM PRODUCTS, NEC
5191	FARM SUPPLIES
5199	NONDURABLE GOODS, NEC
5211	LUMBER AND OTHER BUILDING MATERIALS
5541	GASOLINE SERVICE STATIONS
5561	RECREATIONAL VEHICLE DEALERS
7011	HOTELS, MOTELS & TOURIST COURT
7261	FUNERAL SERVICE & CREMATORIES
7359	EQUIPMENT RENTAL & LEASING,NEC
7384	PHOTOFINISHING LABORATORIES
7389	BUSINESS SERVICES, NEC
7534	TIRE RETREADING & REPAIR SHOPS
7699	REPAIR SERVICES, NEC
7812	MOTION PICTURE & VIDEO PRDTN
7819	SERV ALLIED TO MOTION PICTURES
7996	AMUSEMENT PARKS
7999	AMUSEMENT AND RECREATION, NEC
8062	GENERAL MED/SURGICAL HOSPITALS
8093	SPECIALTY OUTPATIENT CLINICS, NEC
8211	ELEMENTARY & SECONDARY SCHOOLS
8221	COLLEGES & UNIVERSITIES, NEC
8731	COMMERCIAL PHYSICAL RESEARCH
8734	TESTING LABORATORIES
9199	GENERAL GOVERNMENT, NEC
9223	CORRECTIONAL INSTITUTIONS
9711	NATIONAL SECURITY
9999	UNKNOWN

On July 26, 1996, the ARB approved amendments to the Guidelines Report which further define facilities subject to "Hot Spots" requirements. These amendments were approved by the Office of Administrative Law and became effective July 1, 1997.

### Study Approach

This study covers a total of approximately 230 industries with affected businesses. The approach used in evaluating the potential economic impact of the amended fees on these businesses is outlined as follows:

- (1) A typical business from each affected industry was selected from the facility program category data submitted by the districts.
- (2) The highest fee (total of State and district fees), for districts for which the State is adopting a Fee Regulation, was estimated for each facility program category.
- (3) These fees were then applied to a typical business in affected industries in a facility program category.
- (4) The estimated fees were adjusted for taxes.
- (5) The Return on Owner's Equity (ROE) was calculated for each of these businesses by dividing the net profit by the net worth. The adjusted fees were then subtracted from net profit data. The results were used to calculate an adjusted ROE. The adjusted ROE was then compared with the ROE before the subtraction of the adjusted fees to determine the impact on the profitability of the businesses. A reduction of more than 10 percent in profitability is considered to indicate a potential for significant adverse economic impacts.

The threshold value of 10 percent has been used consistently by the ARB staff to determine impact severity. This threshold is consistent with the thresholds used by the United States Environmental Protection Agency and others.

### Assumptions

Since financial data for individual businesses were not available, this study used 1999-2000 Dun and Bradstreet financial data for a nationwide typical business in each industry. Using the nationwide financial data, the ROEs before and after the subtraction of the adjusted fees were calculated for industries listed in Table IV-1. The calculations were based on the following assumptions:

- (1) A typical business on a nationwide basis in each industry is representative of a typical California business in that industry.
- (2) All affected businesses are subject to federal and state tax rates of 35 percent and 8.835 percent respectively.
- (3) Affected businesses neither increase the prices of their products nor lower their costs of doing business through short run cost-cutting measures.

Given the limitation of available data, staff believes these assumptions are reasonable for most businesses; however, they will not be applicable to all businesses.

#### Potential Impact on Businesses

Typical California businesses are affected by the amended fees to the extent that the implementation of the amended fees would change their profitability. Using ROE to measure profitability, we found that the average ROE of sample businesses in the industries listed in Table IV-1 changed by less than 2 percent. This represents a minor change in the average profitability of typical businesses in California.

The change in profitability of individual industries with affected businesses, however, varied widely from the industry averages. For the 242 industries listed in Table IV-1, for example, the change in profitability ranged from a high of 9 percent to a low of 0.002 percent. This variation in the impact of the amended fees can be attributed mainly to two factors. First, some businesses are subject to higher fees due to the type of industry in which they are involved, the type, quantity of emissions, potency of the substances emitted, the numbers of devices and emitting processes, and the location of the business. For instance, the estimated fees for sample businesses in the industries listed in Table IV-1 ranged from a high of \$15,715 to a low of \$35. Second, the performance of businesses may differ from year to year. Hence, the 1999-2000 nationwide financial data used may not be representative of a typical-year performance for some businesses.

The potential impacts estimated here may be high for the following reasons. First, the "Hot Spots" Program fees are not new to affected businesses. The impact of the fee as estimated here tends to be more severe than what it would be if we had used the incremental changes in fees rather than the total fees. Some businesses actually experienced a reduction in their fees and others were exempt from fees this year. Second, affected businesses probably would not absorb all of the increase in their costs of doing business. They might be able to either pass some of the cost on to consumers in the form of higher prices, reduce their costs, or do both.

#### Potential Impact on Consumers

No noticeable change in consumer prices is expected from the amended fees because the fees would have only a minor impact on the profitability of affected business. The ARB



staff project the maximum increase in product prices would be about one-tenth of one percent if affected businesses are able to pass the fees on fully to consumers. Price increases, however, would vary widely from business to business. They would range from a low of almost zero to a high of about one half of one percent.

#### Potential Impact on Employment

Since the amended fees impose no noticeable impact on the profitability of businesses, the staff expects no significant change in employment due to the imposition of the fees. However, the amended fees may impose hardship on some businesses operating with little or no margin of profitability, affecting the creation or elimination of jobs in California.

#### Impact on Business Creation, Elimination, or Expansion

No change is expected to occur in the status of California businesses as a result of the amended fees. This is because the fees have no significant impact on the profitability of businesses in California. However, should the amended fees impose significant hardship on California businesses operating with little or no margin of profitability, some small businesses may be forced out of the market or decide not to expand in California. Also, some businesses may decide against coming to California.

#### Impact on Business Competitiveness

The amended fees would have little or no impact on the ability of California businesses to compete with businesses in other states. This is because the amended fees do not impose a noticeable impact on the profitability of California businesses. However, the amended fees may have an adverse impact on the ability of some California businesses, operating with little or no margin of profitability, to compete with businesses in other states.

#### Conclusion

Overall, California businesses should be able to absorb the costs of the amended fees without significant adverse impacts on their profitability. Although some businesses would potentially experience a greater reduction in their profitability than others, the fee impact should remain absorbable. In addition, the actual impacts of the amended fees on the profitability of California businesses is most likely to be less than estimated in this analysis for the reasons described above. Also, revisions to the Emission Inventory Criteria and Guidelines Report (those amendments were adopted by the Air Resources Board in July 1996, approved by OAL, and became effective July 1, 1997) broaden the exemptions from reporting requirements and fees for many facilities being assessed fees in recent years. Those exempted facilities will no longer have their profitability impacted by the "Hot Spots" program. Also, with the reductions in State and district budgets to support the "Hot Spots" program, the fees have been reduced from those

assessed in previous years. These reductions in fees should also reduce any impact on

the profitability of California businesses.

Since the amended fees impose no noticeable impact on the profitability of California businesses, the staff expects no significant change in employment; business creation, elimination, or expansion; and business competitiveness. However, the amended fees may impose a significant economic hardship on some California businesses operating with little or no margin of profitability.